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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/064,460

07/17/2002

Long-Jyh Pan

ACMP0028USA

5809

27765

7590

05/18/2004

NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)

P.O. BOX 506

MERRIFIELD, VA 22116

EXAMINER

KOYAMA, KUMIKO C

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,460

Applicant(s)

PAN ET AL.

Examiner

Kumiko C. Koyama

Art Unit

2876

AC

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgement is made of receipt of Amendment filed on March 04, 2004.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai (US 6,380,998) in view of Kitai et al (US Patent Application Publication 2002/0163606).

Arai discloses a LCD device including a printed circuit board 34, which are electronic components providing functions, and a conductive film 32 that is electrically connected to a ground pattern or line, which is a ground pad, of the printed circuit board 34 (col 3, lines 55-60). The conductive film is an electrically conductive material electrically connected to the ground pad. The LCD device also includes an LCD panel 13. The back light is guided by the light conductive sheet 14, which is a light guide, directed toward the LCD panel 13 by function of the prism sheet 12 (col 3, lines 33-45). Arai shows that a prism, which is a translucent plate, is located adjacent to the LCD module (Fig. 3). Arai shows that the printed circuit board is near the light guide (Fig. 3). Arai teaches that a reflecting plate 13 is disposed on the light guide and the reflecting plate is adhered with the conductive sheet that is grounded (col 4, lines 20-24, Fig. 3). Arai also discloses that the reflecting plate 31 has a reflective function for reflecting the back

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light and a shield function for shielding the LCD panel against noise generated by the printed circuit board (col 3, lines 60+). Arai also teaches a light source 39 (col 3, line 54).

Arai fails to teach that a second major face of the translucent plate is adjacent to the electronic component and that the reflecting plate is metallic.

Kitai discloses that a light guide includes a clear plastic (Page 5, Paragraph [0057]) and a reflecting layer is a metallic layer (Page 5, Paragraph [0065]).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Kitai to the teachings of Arai in order to provide an image without any alterations by the utilization of colorless, clear, and translucent material and reflect the light for further viewing by the viewers.

3. Claims 2, 4, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai as modified by Kitai as applied to claim 1 above, and further in view of Jonsson (US 5,746,493). The teachings of Arai as modified by Kitai have been discussed above.

Arai as modified by Kitai fail to teach that the translucent plate has a plurality of recess, the light source is a LED, and the function of the electronic components is that of a mobile phone or a personal digital assistant.

Jonsson teaches a plurality of recess on a light guide plate (Fig. 1). Jonsson teaches a light guide for a telephone assembly, which is shown in Fig. 5 and is considered as a portable electronic device. The telephone assembly includes key pads 84 and a liquid crystal display (LCD) 88 (col 4, lines 5-9). The light guide is formed of a translucent plastic material (col 2, lines 44-46). In Fig. 5, the LCD is placed on one face of the light guide. Light sources, such as

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LEDs, are positioned in the light source holes to provide light for the second portion of the light guide (col 2, lines 67+).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings Jonsson to the teachings of Arai as modified by Kitai in order to reflect light in the direction towards the view for easier visibility. Also LED are readily available at a reasonable prices, and subsequently provides lower cost for the product.

4. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai as modified by Kitai as applied to claim 1 above, and further in view of Sato et al (US 5,351,143). The teachings of Arai as modified by Kitai have been discussed above.

Arai as modified by Kitai fail to teach that the electrically conductive material is an electrically conductive sponge.

Sato teaches a conductive material including conductive sponge (col 10, lines 28-29).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Sato to the teachings of Arai as modified by Kitai because a conductive sponge acts in an equivalent manner as a conductive material as taught above and it is also available in a small form, which reduces the amount of spaces that is utilized within the device and further reduces the size of the device overall.

Response to Arguments

5. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

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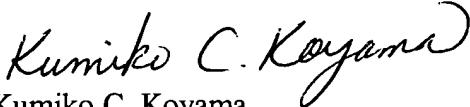
The examiner has found new art that she believes more relevant to the instant application and claims. Therefore, new grounds of rejections have been applied and subsequently, this action is non-final.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kumiko C. Koyama whose telephone number is 571-272-2394. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kumiko C. Koyama
May 17, 2004


DIANE I. LEE
PRIMARY EXAMINER